

## LCLUC NRA-99 Selectees

The Land Cover and Land Use Change NRA-99 had two elements:

- 1) Human and natural disturbance and the implications for carbon dynamics, and
- 2) Development of remote sensing techniques and data sets that could lead to operational forest monitoring systems (Global Observation of Forest Cover - GOFC)

143 proposals have been received. The proposals were sent for mail review, and were subsequently evaluated by a peer review panel of 17 scientists working in the field of Land Cover and Land Use Change that met January 11-13, 2000.

At this stage in the program we are investing in a new-start disturbance research activity and a strategic contribution to GOFC:

- strengthening the NASA carbon program to include disturbance
- laying the science foundation for the proposed 'Recovery' mission
- providing a contribution to GOFC (IGOS-P Carbon Theme - forest cover monitoring, fire and biophysical characteristics)
- developing regional and global data sets
- researching new methods
- transitioning research to the operational domain and using these data and methods for carbon research.

## Disturbance Selectees

**Susan Conard (USFS)** Estimating and Monitoring Effects of Area Burned and Fire Severity on Carbon Cycling, Emissions, and Forest Health and Sustainability in Central Siberia

**Andrew Hansen (Montana State U.)** Monitoring Forest Response to Past and Future Global Change in Greater Yellowstone

**Michael Binford (U.Florida)** Land-Use and Land-Cover Change: Decadal-Scale Dynamics of Land Ownership Land Management and Carbon Storage Patterns in the Southeastern Lower Coastal Plain Region of the U.S.

**Janet Franklin (San Diego State U.)** Operational Monitoring of Alteration in Regional Forest Cover Using Multitemporal Remote Sensing Data

**Marc Imhoff (NASA GSFC)** Measuring Human Impacts on the Biodiversity of Ecosystems

**Chris Elvidge (NOAA NGDC)** Development Sprawl Impacts on the Terrestrial Carbon Dynamics of the United States

**John Pastor (U.Minnesota)** Mapping and Modeling Forest Change in a Boreal Landscape

## Global Observations of Forest Cover (GOFC) Selectees

### Regional Forest Monitoring and Characterization Studies, Collaboration with GOFC Regional Networks

**Nadine Laporte (UMD)** An Integrated Forest Monitoring System for Central Africa

**Jiaguo Qi (Michigan State U.)** GOFC Data and Information for Tropical Forest Assessment and Management

**Paul Desanker (U. Virginia)** Operationalizing GOFC in the Miombo Region and Questions of Carbon: Miombo Region a Source or Sink?

### North American Land Cover and Fire Studies

**Peng Gong (UC, Berkeley)\*** Development of a Long-term Inventory of Fire Burned Areas and Emissions of North America's Boreal and Temperate Forests

**Wei Min Hao (USFS)\*** Biomass Burning in the United States: Past, Present, and Future

**Tom Loveland (USGS)** The Spatial and Temporal Dimensions of Contemporary U.S. Land Cover and Land Use Change and Implications for Carbon Dynamics

**Josef Cihlar (CCRS)\*\*** Satellite Observation of Boreal Land Cover: Methods, Data Sets and Applications

\* Combined into one project

\*\* Foreign (Canada)

### SAR Studies and Datasets

**Guoqing Sun (U. Maryland)** Monitoring Forest Dynamics in Northeastern China in Support of GOFC

**Bruce Chapman (JPL)** The Development of a Fine Resolution, Continental Scale Forest Monitoring System Using SAR Imagery

**Kyle McDonald (JPL)** Monitoring Boreal Landcover and Ecosystem Dynamics at Regional Scales using Integrated Spaceborne Radar Remote Sensing and Ecological Modeling.

### Advanced Method Development

**Ruth DeFries (U. Maryland)** Towards Methodologies for Global Monitoring of Forest Cover Characteristics with Coarse Resolution Data

**John Townshend (U. Maryland)** Improvements in Landsat Pathfinder methods for monitoring tropical deforestation and their extension to extra-tropical areas